

## Castrol Viscogen KL

Synthetic high temperature chain lubricant

### Description

Castrol Viscogen KL™ range are thermally stable synthetic lubricants designed for high temperature lubrication in severe environments, where the use of mineral oils or conventional synthetic oils would result in excessive wear, carbonisation and residue formation. They can be used up to temperatures of +200°C/+390°F, depending on the viscosity.

Viscogen KL have been developed from base fluids which form exceptionally adherent, transparent and odourless lubricating films and an additive system free of solids, metals or silicone which enhances load carrying capability and wear protection

### Application

Viscogen KL is available in 6 different viscosities depending on the ambient and operating conditions. The dimensions of the chain as well as its structural shape (e.g. roller, pin, ladder chains, insertion and flat link hoisting chains) are important when selecting the right viscosity. The way the lubricant is applied must also be considered e.g. manual lubrication, drip feed lubricator, central lubrication, sump lubrication or via spray can.

Viscogen KL finds use in many industrial applications, for example: High-rack storage shelves, bakery machines, paint lines, conveyor chains, tenter frames and dryers, washing plants, underfloor chains, steamers, slashers, baking ovens, slide ways, spindles, ropes, open gear wheels, plastic toothed belts and sheet-fed offset machines. Viscogen KL 23 is especially suitable for use in BOPP (Biaxially oriented Polypropylene) film stretching machines.

### Advantages

- Extremely low evaporation rate, low residue formation and low smoke generation at high temperatures – enabling reduced maintenance, reduced lubricant consumption and better working environments.
- Outstanding load carrying ability under severe mechanical loads and high temperatures as well as excellent penetration on chains and wire rope strands – leading to longer chain life
- No dripping or throwing off at high speeds or high temperatures – giving reduced lubricant consumption
- Excellent rust protection, extraordinary oxidation resistance and no hard carbon build up - leading to longer chain life and reduced maintenance

## Typical Characteristics

Test	Method	Unit	KL 3	KL 9	KL 15	KL 23	KL 130	KL 300
Colour		-	Green					
Base		-	Synthetic Oil					
ISO viscosity group	DIN 51519	-	32	100	220	-	1500	-
Density at +15°C/+ 60°F	ISO 12185/ ASTM D4052	g/ml	0.948	0.964	0.947	0.954	0.933	0.925
K.V. @ 40°C/104°F	ISO 3104/ ASTM D445	mm <sup>2</sup> /s	31.5	99	219	249	1570	4030
K.V. @ 100°C/212°F	ISO 3104/ ASTM D445	mm <sup>2</sup> /s	6	12	20	23	97	210
Flash Point, COC	ISO 2592/ ASTM D92	°C/°F	230/450	230/450	250/480	250/480	220/430	220/430
Pour Point	ISO 3016/ ASTM D97	°C/°F	-60/-76	-51/-60	-39/-38	-39/-38	-27/-17	-12/1
Copper Corrosion (3 hrs @ 100°C)	ISO 2160 / ASTM D130	Rating	1	1	1	1	1	1
Rust Test (24 hrs synthetic sea water)	ISO 7210 / ASTM D665B	-	Pass	Pass	Pass	Pass	Pass	Pass
Four Ball Wear Test (1 hr, 300 N, 1420 rpm.), Scar Diameter	DIN 51350	mm	0.6	0.5	0.4	0.4	0.4	0.4

Subject to usual manufacturing tolerances.

## Additional Information

If lubricant drips off, select next higher viscosity.

Compatible and miscible with mineral oils.

Easy and economical use with adjustable spray head. Spraying foam remains until oil has penetrated into the friction point.

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